

What is claimed is:

1. A substitution call control system including an ATM (Asynchronous Transfer Mode) subscriber network of an ATM communication network, said ATM subscriber network comprising:

5 a plurality of network terminators respectively connected with a plurality of subscriber terminals; and

an ATM subscriber line concentrator which accommodates VCs (Virtual Connection) to said  
10 plurality of network terminators, and is connected with a ATM switching apparatus of said ATM network through a UNI (User-Network Interface), and

wherein said ATM subscriber line  
15 concentrator includes a substitution call control function to substitute for said plurality of network terminators and said subscriber terminals for a call control.

2. A substitution call control system according to claim 1, wherein when one of said plurality of subscriber terminals issues a call processing request to said ATM subscriber line  
5 concentrator through a corresponding one of said plurality of network terminators, a line number connected to said one subscriber terminal and an

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ATM address of said one network terminator or  
said one subscriber terminal are held.

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3. A substitution call control system  
according to claim 1, wherein when one of said  
plurality of subscriber terminals issues a call  
processing request to said ATM subscriber line  
5 concentrator through a corresponding one of said  
plurality of network terminators, a call number  
is held.

4. A substitution call control system  
according to claim 1, wherein when a SVC  
(Switched Virtual Channel) connection is  
established in response to a call processing  
5 request issued from one of said plurality of  
subscriber terminals to said ATM subscriber line  
concentrator through a corresponding one of said  
plurality of network terminators, a VPI (Virtual  
Path Identifier) value and a VCI (Virtual Channel  
10 Identifier) value of said SVC connection are held.

5. A substitution call control system  
according to claim 1, wherein said ATM subscriber  
line concentrator and each of said plurality of  
subscriber terminals are connected by a PVC  
5 (Permanent Virtual Circuit) connection to allow a

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substitution call control message to be transmitted and received.

6. A substitution call control system according to claim 1, wherein said ATM subscriber line concentrator and each of said plurality of network terminators are connected by a PVC

5 (Permanent Virtual Circuit) connection to allow a substitution call control message to be transmitted and received.

7. A substitution call control system according to claim 5, wherein a VPI/VCI value (a value of VP identifier/VC identifier) of said PVC connection is 0/5.

8. A substitution call control system according to claim 6, wherein a VPI/VCI value (a value of VP identifier/VC identifier) of said PVC connection is 0/5.

9. A substitution call control system according to claim 5, wherein said substitution call control message is transmitted and received in a same protocol as that for a subscriber data.

10. A substitution call control system

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according to claim 6, wherein said substitution call control message is transmitted and received in a same protocol as that for a subscriber data.

11. A substitution call control system according to claim 5, wherein said substitution call control message is transmitted and received by a Classical IP and ARP over ATM system defined in IETF (Internet Engineering Task Force) RFC (Request For Comment) 1577.

12. A substitution call control system according to claim 6, wherein said substitution call control message is transmitted and received by a Classical IP and ARP over ATM system defined in IETF (Internet Engineering Task Force) RFC (Request For Comment) 1577.

13. A substitution call control system according to claim 5, wherein said substitution call control message is transmitted and received by an xDSL over ATM system through a PVC connection, wherein said xDSL is a general term of various typea of DSL (Digital Subscriber Line, and includes an Asymmetric DSL, a high-bit-rate DSL, a Rate-Adaptive DSL, a Symmetrical DSL and a Very-high-bit-rate DSL).

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14. A substitution call control system according to claim 6, wherein said substitution call control message is transmitted and received by an xDSL over ATM system through a PVC connection, wherein said xDSL is a general term of various type of DSL (Digital Subscriber Line, and includes an Asymmetric DSL, a high-bit-rate DSL, a Rate-Adaptive DSL, a Symmetrical DSL and a Very-high-bit-rate DSL).

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15. A substitution call control system according to claim 1, wherein each of said plurality of subscriber terminals and a corresponding one of said plurality of network terminators are connected in IEEE 802.3 ether network.

16. A substitution call control system according to claim 1, wherein each of said plurality of subscriber terminals and a corresponding one of said plurality of network terminators are connected by a PVC (Permanent Virtual Circuit) connection.

17. A substitution call control system according to claim 16, wherein a VPI/VCI value (a value of VP identifier/VC identifier) of said PVC

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connection is 0/5.

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